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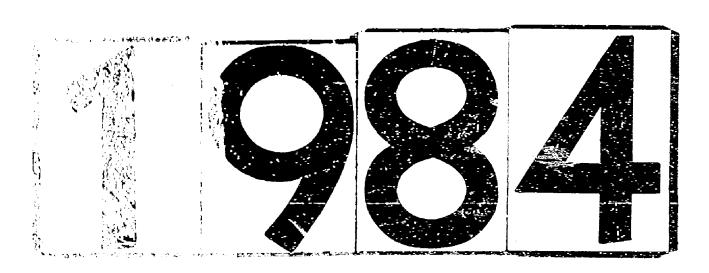
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LOW PRESSURES PRESERVER COLLEGE AVENUE POOL

July 11, 1952

FILE COPY

Director Office of Haval Research Branch Office 1000 Geory Street San Francisco 9, California

MONTHIX STATIS REPORT - JUNE 1952

Contract M7=omr=295-Task 3 Project Humber MR 061-003

Dear Sirt

Progress on the contract for the menth of June has been as follows:

- 1. A preliminary measurement of a reflected molecular bear was successfully recorded. The signal strength appears sufficient for the proposed reflection experiments. A minor angust of nedification will be necessary to refuse the electrical moise level and to produce a clear signal. This work is under may.
- 2. Eddification of the semi-adjustable diffusor is continuing (item 2 of the May status report). Future tests are plaumed to evaluate the modified equipment.
- 3. Evaluation tests of the Me. 8 nearle (N = 4.0 ideal) have been emploted. The results of this investigation will be presented in the form of an appendix to the report describing the design of this nearle.
- 4. An investigation of the performance of an ion pulse true velocity measurement system was carried out in Itme using the No. 3 Wind Tunnel. This program is sponsored by the Mational Advisory Constitute for Aeronautics.
- 5. The following report was issued in James
- H-150-91: "Heat Transfer from Right Circular Conce to a Rarefied Cas in Supersonic Flow" by R. E. Brake, Jr., and G. J. Haslach.
- Abstract: This report describes an experimental investigation of best transfer from right circular cones to a resolved gas in supersonic flow (2.16 4 3.74) and at low Reynolds numbers (76 Re 3270) in the slip flow region. The heat transfer coefficient, No. 18 shows to be a linear function of the parameter VRe /N ever the reage investigated. Overall free atrans recovery factors exhibit the case sharp increase as the gas is resolved, as has been observed earlier in the case of opheres.

- 6. Mr. F. (), Minimal) presented a paper at the I.S.A. student meeting in Kom Augelon. The subject was Eskin Friction of a Flat Flate in Revelled (Langelon.)
- the Visitings wis Kollowing persons visited the project during the months

B. P. Rerdy . University of Illinois

Institute of Numerical Analysis, Univ. of Calif.,

Los Angeles, Calif.

Kinin Marian - Maca, Los Angeles, Calife

Rolley b M. Hickeb . University of Washington, Washington, D. C.

Within progress reports to be issued under the above contract will be sub-titled by Professor S. A. Schanf, the Faculty Investigator supervising the investigations.

Very truly yours,

S. A. Schaaf,

Faculty Investigator

BASI/bp

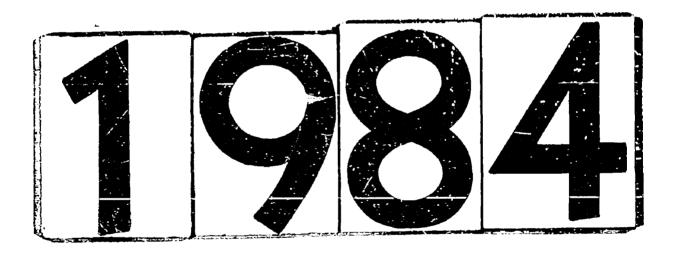
Dr. Norton Alperin, Western Regional Office, Hoots, ARDC, 55 S. Grand Ave., Pasadena, Calif. (1)

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